

## Dr Seth Fishman 561-270-9286 - Questions

## Lisa 302-222-2220 – orders & payments

### NEW PRODUCTS

#### 1) HP Bleeder Plus:

A combination of a proven and test free “bleeding” (EIPH: Exercise induced pulmonary hemorrhage) and analgesic. The analgesic constituents have been published as effective and safe in a peer reviewed study in global journals. Made of a combination of naturally occurring amino acids they are not easily sourced in their proper enantiomorphs.

Evidence of EIPH can be found in ALL horses engaged in strenuous exercise. Racing most notable and although most diagnostic evidence is subclinical, the overall performance is always affected. Pressure within pulmonary vasculature increases nearly 3-4 fold during racing. Heart rate rises and peripheral vasculature constricts causing more resistance and more work for heart.

HP bleeder plus contains the strongest test free vasodilators available on the market. Vasodilation is a benefit to all athletes as shown in numerous published articles for humans. Horses benefit even more as they are prone to EIPH. Lasix is the current common treatment for EIPH which will aid in the reduction of blood volume, but will also produce dehydration and the risk to the equine of tying up and other conditions. HP Bleeder Plus can achieve same results without the side effects of Lasix.

HP bleeder can be used safely with Lasix and any other medication as its all natural and has no know toxicity. Even if you horse does not demonstrate obvious “Pain or Bleeding” the likely there is no pain or bleeding is near zero. Typically used 4-6 hours prior to strenuous exercise. For known bleeders or painful horses a loading dose 18-24 hours prior to strenuous exercise as a second dose.

#### 2) Bleeding Pills

Bleeder pills increase vascular integrity and help reduce inflammation. They have coagulant properties as well. They have benefits far beyond bleeding. If you wanted to make an analogy they would be equivalent to giving a low dose corticosteroid for prevention of bleeding.

HP Bleeder plus is a strong natural vasodilator and mild natural analgesic. Vasodilators are extremely beneficial for many reasons beyond decreasing bleeding in horses. The natural analgesic is just an added benefit as pain will increase likely hood of bleeding.

### **3) V02 MAX**

**VO2 Max: HP Bleeder plus with additional ingredients. Usually 10 mls 4-5 fors prior to race.**

All-natural Japanese amino acid-based product that has profound vasodilatory properties. Vasodilation benefits all performance animals because it reduces cardiac exertion during performance. Pharmaceutical vasodilators are usually tested in most jurisdictions and disciplines because they are proven to be effective sports enhancing. Vasodilation significantly reduces EIPH (Exercise-Induced Pulmonary Hemorrhage) and Latic Acid accumulation. The formula is a proven oral pre-work designed for Olympic athletes.

Best results are when used within 2 hours of exertion and results have lasted up to 6-8 hours. Dose is 10-20 mls Intravenously for a 1000 lb (450 kg). Although this product will not interfere with other medications DO NOT mix with anything else in the same syringe.

### **4) Homeogestic: (NATURAL ANALGESIC- PAIN KILLER)**

3 products in ONE! A combination of the 3 most common preparatory products in global racing combined in one product for the most value and benefit. MSM and DMG are well documented in racing industry and are both included in the highest bioavailable concentration. Proprietary analgesic combinations based on a published peer reviewed article are included as the 3<sup>rd</sup> "Product".

There are no published toxicities with the recommended doses and should be considered with all performance animals. The literature regarding the benefits or both MSM and DMG in the equine athlete is endless. Now both are available in a combination therapy with the added benefit of a proven Analgesic.

### **5) PSDS: ( NATURAL ANALGESIC – PAIN KILLER )**

This product is based on the original Panacin formulation, it has 2.5 times more D-Phenylalanine then all other compounded and production versions.

It is a mild anti-inflammatory compound and is a prominent component in wound healing. Carnosine is a major muscle buffer. In muscle tissue, phosphate and carnosine together provide approximately 90% of the buffering capacity. Intense exercise always involves an anaerobic component and thus results in significant reductions in ATP, an increase in muscle lactic acid, and an increase in tissue acidity. Although the acidity can normally be buffered by the body, under high stress conditions the lactate

build-up is too fast for the body to cope with. With increasing acidity comes premature muscle fatigue, with an associated decrease in performance. Carnosine supplements provide the vital buffering capacity, as well as antioxidant activity to improve muscle function and delay fatigue. Carnosine improves cardiac contractibility, sensitizes cellular calcium channels to their activators, and protects against hydroxyl free radicals

Best used over 2-3 days prior to strenuous exercise. The typical dose is 5 mls and the last dose is usually administered 4-6 hours prior to strenuous exercise. Given its safety many trainers opt to give 10 mls for last dosage.

## **6) Equi-Mass: PG-2 ( MUSCLE GROWTH FACTOR)**

Human growth hormone is a highly controlled substance and has many permanent negative side effects making it dangerous to both purchase and use. Modified growth factor specially targeted to muscle tissue are neither controlled nor proven dangerous. In their natural form they are released during work outs or when there is damage to muscle tissue. With a short ½ life of minutes it was not advisable for therapeutics other than localized injection to specific muscle body. A commercially modified version was tested and produced mixed results in equine athletes. After altering the modification many times over a new version has been perfected and now working well. It's a unique product and specific for equine athletes.

The product has been safely used in many jurisdictions 5 days out although we recommend 7 days for complete elimination. Usually a vial is administered IM or IV every 3-5 days for a series of 3-4 shots. Most horses can be maintained with one vial a week thereafter.

This product is best used 12-24 hours following strenuous exercise. Used along with a legitimate Thymosin fractional sequence optimal recovery has been noted both esthetically and by independent lab analysis.

## **7) GNRH: (FACTREL, ANDROGENIC HORMONE)**

Gondorelin Acetate is similar to Factrel and identical in sequence to Cystorelin. This product is best used for sulking horses. Typically ½ to full bottle is used 4-6 hours prior to strenuous exercise. Both Factrel and Cystorelin require refrigeration and if not stored properly they may lose potency. As a lyophilized presentation GNRH is less likely to degrade and loose potency if not stored under refrigeration at all times.

## **8) ITPP PLUS (INCREASE OXYGEN RELEASE IN BLOOD)**

ITPP plus other ingredients. ITPP increases oxygen release. Compared to what's sold online its less than ½ the price. Most people are using ½ bottle night before and remainder of bottle 4-5 hours before event.

### **9) TB-7: (ACCELERATED TISSUE REPAIR ESPECIALLY IN LUNGS ) \*\***

This product has the same sequencing as the infamous TB 500 product except now available at a fraction of the cost. TB 500 marketed this well studied sequence from the many published results in the numerous use patents filed for this sequence. Originally it was synthesized as the complete naturally occurring sequence at the request of Dr. Brennan for possible use in Cystic Fibrosis. Since the original studies the sequence has been fractioned and the terminal ending changed for higher efficacy. Although the literature preached this as a wonder peptide the reality is that product is best used in small or moderate doses for recovery. It has in some cases been effectively used as short term prerace, but in most cases this has been short lived and with athletes crashing. Like all immunomodulators they are highly beneficial in small strategic doses and **promote overall healing and increased immunity. Helps in after race care for bleeders, proactively promotes healing.**

I have followed up on more than 5000 doses worldwide and found the following treatment protocol to work best. 1 vial 12-24 hours post event for up to 4 weeks. Following 4 doses many will find using ½ vial thereafter more than adequate for maintenance. It is NOT recommended as prerace ever as the upside has been unpredictable and can be detected in some jurisdictions for up to 96 hours!

### **11) BPR BLUE ( STRONG PAIN KILLER & SEDATIVE)**

Strong analgesic. Like other products I would start with ½ cc IV and work my way up.

### **12) Equitosan: ( ANTI-INFLAMMATORY FOR JOINTS)**

Pentosan Polysulfate 250 mg/ml. This product was launched by Naturevet as a company and was instrumental in their 30 million dollar buyout by Ceva. Well studied for its efficacy in numerous systemic joint disease the product is considered one of the 3 best systemic medications. Studies have been shown that when combined with systemic HA injections the product is potentiated and better than when either used alone.

The raw API (Active Pharmaceutical Ingredient) is very expensive and most compounders are not able to directly source and using cheap Indian or Chinese product. Equitosan is same source as Ceva/Naturevet and high quality alternative to the name brand.

### **13) ACTH: (IN SMALL DOSES WILL ACT AS NATURAL ANTI-INFLAMMATORY,LARGER DOSES (2CC OR MORE) WILL ACT AS A SEDATION**

With testing of corticosteroids there are not many viable options left. ACTH (Adrenocorticotrophic Hormone) causes the adrenal gland to release cortisol the body's natural corticosteroid. Most companies supply this peptide in an aqueous base formulation with questionable stability. The original gel was formulated by a multibillion dollar pharmaceutical with a non-aqueous based proven

gel formulation. Having ACTH lyophilized guarantees stability and efficacy. It has been recommended that in jurisdictions that test cortisol levels only 250 IU's be used. The typical dose is 250 IU's 4-6 hours prior to strenuous exercise. Each vial contains 1000 IU's and is reconstituted and kept in refrigerator for longest shelf life. The bottle once reconstituted should be used with 5 days.

#### **14) Oxygenator: (INCREASED OXYGEN RELEASE IN BLOOD)**

ITPP upon initial studies was quite promising for the equine athlete. There is no commercial source and renowned Dr. Tobin who consults with all jurisdictions had to synthesize a sample for Hong Kong for testing purposes in 2012. While many products claim to have it as an ingredient it is not likely. There are numerous analogs in the market, but as a complex sugar it must be pH'd precisely and prepared correctly.

Oxygenator has a combination of a unique complex sugar and MSM mixed by biochemist and not compounders. Critical pH is maintained throughout the entire mixing and bottling process to insure molecular structure and efficacy. The suggested use is 10 to 15 cc IV 24 hours out and another 10 to 15 cc 4 hours prior to event. Using larger amounts is not of benefit and smaller dosages have demonstrated more profound effects.

#### **15) HEPTAMAMO- B12 ( MILD BLOOD BUILDER)**

Facilitates energy availability during exercise, and provides a potent anti-catabolic effect to limit muscle damage during exercise.

Actions Ornithine alphaketoglutarate (OAK) stimulates Growth Hormone and Insulin release, for a potent tissue building effect. Trials have demonstrated that OAK effectively reduces muscle loss after surgery and trauma, and increases the synthesis of muscle protein. OAK also acts as an ammonia scavenger within the body, and provides the body with glutamine (the most abundant free amino acid in muscle tissue). The level of glutamine is directly correlated to the level of muscle protein synthesis. During exercise large amounts of glutamine are lost from muscle tissue. As the provider of glutamine, OAK has a potent anti-catabolic effect (i.e. helps prevent tissue breakdown, especially muscles

#### **16) EGH: (INCREASES TESTOSTERONE)**

DHEA at the highest concentration and the source was not cheap soy based, but synthesized.

DHEA is a prohormone that is predominantly used in human athletes to increase testosterone levels. The benefit of using a prohormone is that the Testosterone levels will increase balanced.

Using testosterone by itself alters the ratios and much more easily detected. Giving one shot a week has never caused levels to test positive. In some cases in HK people using 2 shots per week for more than 4 weeks had pushed the upper limits of testosterone limits.

### **17) Equifactor:**

Modified growth factor for muscles. The peptide was studied for years and the human version contains a carry molecule that is easily detected. Having the carrier molecule altered allows the peptide to be eliminated within 4 days. The peptide specifically targets damaged muscle tissue and accelerates healing. Some have noticed increased RBC's using the product.

I cannot recommend using within 4 days, but there are some using the day before for tie up horses. Since the molecule is altered, the labs could never detect unless a snitch tuned a bottle in and the racing authorities decided to make a test. This is highly unlikely, but a possibility.

Most are using 2 doses a week for 3-4 weeks then going to once a week. My recommendation is to give one shot following the race for increased recovery. The product is being patented in 23 countries currently.

### **18) LC200 ( BLOOD BUFFER)**

**Our product is 200 mg/ml and equivalent to Two 100 ml bottles of Physine**

#### **Brief Description**

L-Carnosine in an amino acid supplement with strong muscle buffering and antioxidant actions.

From Ceva/Nature Vet brochure:

***“COMPOSITION: Contains L-Carnosine 50 mg/ml***

#### ***ACTIONS:***

***L-Carnosine Injection is an anti-oxidant (reduces tissue damage) and a primary muscle buffer. Carnosine is related metabolically to histamine and has immune-potentiating properties which may possibly be of value in immune deficiency states.***

***Carnosine is a physiological antioxidant able to scavenge free radicals and efficiently protect the lipid phase of cell membranes. It is a mild anti-inflammatory compound and is also a prominent component in wound healing.***

***Carnosine is a major muscle buffer. In muscle tissue, phosphate and carnosine together provide approximately 90% of the buffering capacity. Intense exercise involves an anaerobic component and thus results in significant reductions in ATP, which increases muscle lactic acid and also an increase in tissue acidity. Although the acidity can***

*normally be buffered by the body, under high stress conditions, the lactate build-up is too fast for the body to deal with. With increasing acidity comes premature muscle fatigue with an associated decrease in performance.*

*Carnosine supplements provide the vital buffering capacity as well as antioxidant activity to improve muscle function and delay the onset of fatigue.*

*Carnosine improves cardiac contractibility, sensitizes cellular calcium channels to their activators and protects against hydroxyl free radicals.”*

## **19) SERENITY ( SEDATION)**

It's an anti-anxiety for the most part. Takes away stress without affecting performance. Typically 5-10 cc IV 4-6 hours before event

I use ONLY Suntheanine brand to insure quality and make certain no caffeine. It's fermented and not extracted from green tea leaves. Virtually all other brands are extracted and could have caffeine contamination.

Suntheanine is anxiolytic compound: Reduces Anxiety.

L-Theanine can cross the blood brain barrier and has many published studies demonstrating it can significantly reduce anxiety and stress. It was also shown to increase GABA and stimulates dopamine in the brain. More recent studies have shown it can increase serotonin levels as well. Having the ability to increase 3 key neurotransmitters the end result is a destressed mind and muscle relaxation.